

DEPARTMENT OF MARINE RESOURCES

CHAPTER 23

STANDARDS FOR CLOSURE OF CONTAMINATED OR POLLUTED FLATS

TITLE INDEX

- 23.01 Definition
- 23.10 Closure of Polluted Areas
- 23.20 Designation of Depuration Digging Areas
- 23.30 Closure of Contaminated Areas
- 23.40 Repeal of Polluted or Contaminated Area Closures

DEPARTMENT OF MARINE RESOURCES

Chapter 23 - Standards for Closure of Contaminated or Polluted Flats

SUMMARY:

This rule provides standards for assessing water quality and shellfish meat to determine whether shellfish are or may become contaminated or polluted requiring closure of affected flats to protect the public health and safety. Standards govern closures for bacterial pollution or contamination as well as designation of depuration digging areas.

23.01 Definition.

- A. Coliform bacteria. The total coliform bacteria group includes all of the aerobic and facultative anaerobic, Gram-negative, non- sporeforming bacilli which ferment lactose with gas formation within 48 hours at 35°C. Bacteria from this group which will produce gas from lactose in a suitable multiple tube procedure liquid medium (EC or A-1) within 24 ± 2 hours at $44.5 \pm 0.2^\circ\text{C}$ in a water bath will be referred to as fecal coliform bacteria. These definitions shall not preclude or invalidate the use of other estimates of coliform and fecal coliform bacteria approved by the National Shellfish Sanitation Program.
- B. Most probable number (abbreviated MPN). The MPN is a statistical estimate of the number of bacteria per unit volume.
- C. Sanitary survey. The evaluation of all actual and potential pollution sources and environmental factors having a bearing on shellfish growing area water quality.
- D. Shellfish growing area. An area which supports or could support live shellfish.

23.10 Closure of Polluted Areas.

An area shall be closed to the harvest of shellfish immediately if one or more of the following conditions exist:

- A. If a sanitary survey reveals that during the most unfavorable hydrographic and pollution conditions water samples taken from the area exhibit geometric means exceeding 70 MPN of total coliform bacteria and/or exceed 14 MPN fecal coliform bacteria per 100 milliliters of water and/or water samples indicate variability in quality beyond standards specific to the tests accepted by the National Shellfish Sanitation Program.
- B. A sewage treatment plant, or other sewage discharge source, could pollute the shellfish growing area in the event of treatment malfunction, overload or poor operation.
- C. Pathogenic microorganisms, radionuclides or harmful industrial wastes reach the shellfish growing area in dangerous concentrations; or
- D. Sufficient current information is not available to assure above conditions do not exist **or** current information does not permit prediction that the above conditions are unlikely to occur.

23.20 Designation of Depuration Digging Areas.

The Commissioner shall designate an area closed to all harvesting of shellfish except depuration digging conducted in accordance with DMR regulations if water samples taken from the area exhibit a geometric mean in excess of 14 MPN and less than 88 MPN fecal coliforms/100 milliliters of water or a geometric mean in excess of 70 and less than 700 MPN total coliforms per 100 milliliters of water. Prior to designating an area suitable for harvesting shellfish to be cleansed by depuration, a sanitary

survey and sampling shall be conducted to assure that under predictable environmental conditions shellfish to be harvested and water quality will meet depuration standards.

23.30 Closure of Contaminated Areas.

- A. An area shall be closed to the harvest of shellfish immediately if the meats of shellfish harvested from that area contain 80 micrograms of Paralytic Shellfish Poison toxins per 100 grams of shellfish meats or contain concentrations of other toxins or contaminants known to be harmful to consumer health. The commissioner may also close surrounding areas and areas of lower toxicity levels to provide a margin of safety in the event of rapidly changing toxicity levels.
- B. The Commissioner may close areas or fisheries if sufficient current information is not available to assure above conditions do not exist **or** current information does not permit prediction that the above conditions are unlikely to occur.

23.40 Repeal of Polluted or Contaminated Area Closures.

The Commissioner shall repeal polluted or contaminated area closure regulations when sanitary surveys reveal that the pollution or contamination conditions no longer exist and that shellfish may be harvested from the area without threat to the public health.

DEPARTMENT OF MARINE RESOURCES

CHAPTER 23

STANDARDS FOR CLOSURE OF CONTAMINATED OR POLLUTED FLATS

INDEX

EFFECTIVE DATE:

June 15, 1983, EMERGENCY, EXPIRED 09/13/83

AMENDED:

October 26, 1983

January 16, 1989 (REPEAL of Section 40)